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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,938	08/07/2001	John Wirth JR.	3584-9	9523

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EXAMINER

WALSH, BRIAN D

ART UNIT

PAPER NUMBER

3722

DATE MAILED: 04/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/922,938

Applicant(s)

WIRTH ET AL. *MT*

Examiner

Brian Walsh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12, 14-16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 is/are allowed.
- 6) ☒ Claim(s) 12, 14-16 and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

FINAL ACTION

Specification

1. The Examiner acknowledges the error in objecting to the abstract for containing more than one sentence. That objection is withdrawn.
2. The use of the trademarks BALDOR and MINARIK have been noted in this application. The proper capitalization is noted and, therefore, the objection is withdrawn.

Drawings

3. The objection to the drawings is withdrawn in view of Applicant's arguments.

Claim Objections

4. The objections to claims 3 and 8 are withdrawn in view of Applicant's amendment.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 12 is finally rejected, as necessitated by amendment, under 35 U.S.C. 102(b) as being anticipated by McCormack.

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McCormack discloses a lathe assembly comprising a base unit (11) inherently having first and second longitudinal ends, a headstock assembly (12) inherently having a spindle housing having a spindle shaft extending therethrough. McCormack further discloses a first lathe bed (14) assembly provided on the base unit and including a bedway (illustrated in figure 2) extending longitudinally in a direction parallel to the longitudinal axis of the spindle for receiving on of a tool rest and a tailstock and a second lathe bed assembly (13) detachably coupled to one of the ends of the base unit including a bedway for receiving a tool rest or tailstock assembly (Abstract, lines 13 – 16). McCormack inherently discloses a second base supported on an opposite side of the base unit remote from the first base since McCormack discloses the assembly is modular, or made of standardized units, and can therefore be replicated in either direction (Abstract, lines 17 – 18).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 14, 16, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCormack in view of Caddaye et al. and in further view of Hardy.

McCormack discloses all of the elements as set forth in the above rejection. It is clear in figure 2 that McCormack discloses a guide in the bedway (labeled as 'bw' by the Examiner) but

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does not explicitly state that a tailstock is selectively slidable in that guide and has a generally circular transverse cross-section and generally elliptical longitudinal section.

Regarding Claim 18, McCormack discloses a second base unit (36) mounted to and supporting a longitudinal end of the second lathe bed assembly (13) remote from the first base unit (14).

Regarding Claim 19, McCormack discloses a longitudinal (13B) end of the second lathe bed assembly (13) remote from the first base unit (14) which is substantially unsupported.

Please refer to figure 1 of McCormack

However, McCormack fails to disclose a selectively slidable tailstock in the bedway of the lathe.

Caddaye et al. discloses a modular lathe similar to the instant invention including a tailstock (23) that is selectively slidable in the bedway of the lathe. It is clear from figure 3 that Caddaye et al. discloses a guide nearly identical to that which is disclosed by McCormack in figure 2.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the lathe bed of McCormack to include a selectively slidable tailstock as taught by Caddaye et al. since Caddaye et al. discloses an identical guide in the bedway of a lathe including a selectively slidable tailstock in order to allow the tailstock to be properly brought into alignment and properly support the workpiece (Col. 1, lines 56 – 58).

Neither McCormack or Caddaye et al. disclose a tailstock with an elliptical longitudinal shape.

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Hardy discloses a lathe similar to the instant invention with a tailstock (12) that is clearly of a generally elliptical shape in the longitudinal direction and had a circular cross-section, transverse to the longitudinal direction. Please refer to figure 1. It is inherent that the tailstock has a rotatable quill disposed therein.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the tailstock of either McCormack to have the dimensional characteristics of Hardy since Hardy teaches the use of this standard tailstock (Col. 2, lines 21 – 22) on a lathe to provide a lathe of simple and economical construction (Col. 1, lines 69 – 71).

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hardy in view of McCormack.

Hardy discloses a lathe assembly comprising an indexing assembly for angularly positioning and holding the spindle shaft (18) with respect to the housing at any one of a plurality of intervals. Hardy disclose the indexing assembly including an indexing component (40) fixedly secured to the spindle shaft (18) and an indexing pin (60) mounted to the housing of the headstock assembly (16) (Col. 2 line 75 – Col. 3 line 8). However, Hardy fails to disclose a modular lathe bed assembly and a spring-biased pin included in the indexing assembly.

Regarding the modular element of the invention, McCormack discloses all of the elements as set forth in the above rejections.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hardy to include the second lathe bed as taught by McCormack, since McCormack teaches the use of a second bed in multiple configurations in a modular lathe in order to provide adaptability to fulfill varying purposes (Col. 1, lines 4 – 6).

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Regarding the spring-biased nature of the pin for the indexing assembly, Hardy discloses the same elements of the indexing assembly as claimed in the instant invention except explicitly discloses a threaded fastener means for forcing the pin (60) to engage the indexing assembly.

It would have been an obvious matter of design choice at the time the invention was made to use a spring-biased pin in lieu of a threaded fastener since the applicant has not disclosed that the spring solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with a threaded fastener.

8. Claims 20 and 21 are finally rejected under 35 U.S.C. 103(a) as being unpatentable over Hardy in view of McCormack and in further view of Clay.

Hardy and McCormack disclose all of the elements as set forth in the above rejections, however, Hardy and McCormack fail to disclose a tool rest assembly slidably disposed in the a bedway and a locking assembly for locking the tool rest to the bedway.

Clay discloses the tool rest assembly comprises a tool support housing (43) extending vertically from a tool rest main body (10), the tool rest main body comprising a tool rest housing (12) and a locking assembly for selectively locking the tool rest housing to the bedway (50) the locking assembly comprising a locking plate (22) for engaging an undersurface (50A) of the bedway. Clay further discloses a slider block (55) seated and disposed within the tool rest housing, a non-circular locking shaft (15) or cam extending longitudinally of the housing and disposed through a bore (13) in the slider block, and a locking piston vertically and slidably disposed in the slider block, the locking piston having a bore for being aligned with the bored of the slider block to receiving the locking shaft and having a shaft for being detachably mounted to the locking plate. The rotation of the locking shaft about the longitudinal axis thereof lifts the

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locking piston and the locking plate mounted thereto while pressing the block so as to clamp the housing to the bedway of the lathe (Col. 2, lines 23 – 58 and Col. 3, lines 41 – 49) .

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the tool rest of Hardy to include the slidable and lockable tool rest of Clay, since Clay teaches the use of a banjo cam lock for a lathe in order to provide appropriate positioning for the carpenter as well as to provide effective clamping (Col. 1, lines 39 – 41).

Allowable Subject Matter

9. Claims 1 – 10 are allowed.

10. The following is an examiner's statement of reasons for allowance: the prior art did not disclose nor render obvious the combined use of a locking assembly and an indexing assembly in a lathe wherein the locking assembly is for selectively locking the spindle with respect to the headstock housing at 90 degree intervals and the indexing assembly is for angularly positioning the spindle with respect to the housing at any one of a plurality of intervals intermediate the 90 degree intervals of the shaft locking assembly. Hardy (U.S. Pat. No. 2,700,912) is clearly the closest example of this element in the prior art, however, Hardy fails to disclose, either explicitly or inherently, two locking/indexing assemblies with separate and distinct capabilities both interacting with a single lathe headstock spindle.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

11. Applicant's arguments with respect to claims 1 and 2 have been fully considered and are persuasive. The rejection to claims 1 and 2 have been withdrawn.

Applicant persuasively argued that Hardy fails to show two separate and distinct mechanisms capable of securing a spindle in a lathe. While Hardy can be interpreted to have a shaft locking assembly and an indexing assembly, Applicant explicitly claims that each are capable of securing the spindle in a separate and distinct manner. Hardy clearly shows only one spindle shaft retaining device. A rejection to claim 1 under 35 USC 103(a) obviousness for simple duplication of parts (see *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8) since, as claimed, Applicant has not merely duplicated parts on the lathe. The shaft locking mechanism is explicitly for locking the spindle shaft with respect to the housing at specific 90 degree intervals while the indexing assembly is for performing the same function at a plurality of intervals intermediate to the 90 degree intervals obtained by the shaft locking mechanism.

Applicant's arguments with respect to claim 12, 14 – 16 and 18 – 20 have been considered but are moot in view of the new ground(s) of rejection.

Faxing of Responses to Office Actions

12. In order to reduce pendency and avoid potential delays, TC 3700 is encouraging FAXing of responses to Office Actions directly into the Group at (703) 872-9302. This practice may be

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used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into TC 3700 will be promptly forwarded to the examiner.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Clement discloses a lathe similar to the instant invention with a tailstock slidably disposed in the lathe bed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Walsh whose telephone number is (703) 605-0638. The examiner can normally be reached on Monday - Friday 7:30 A.M. to 4:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (703) 308-2159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.



BDW
March 29, 2003



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